

CLAIMS

1. An image reading apparatus comprising:

5 a plurality of image sensor chips each of which includes
a plurality of photoelectric conversion elements and performs
outputting of electric charge accumulated due to light received
by the photoelectric conversion elements and resetting of the
accumulated electric charge; and

10 a plurality of control chips for controlling operation
of the image sensor chips;

wherein each of the control chips includes a resolution
data input section to which resolution data to specify resolution
is inputted, and also includes a reset signal generator for
generating a reset signal for performing the resetting of the
15 electric charge in a cycle corresponding to the resolution data
inputted into the resolution data input section.

2. The image reading apparatus according to claim 1, wherein
each of the control chips comprises a resolution void terminal
20 for selectively inhibiting image reading at a predetermined
resolution, the image reading at the predetermined resolution
being inhibited when the resolution void terminal is held in
a first wiring state but being enabled when the resolution void
terminal is held in a second wiring state different from the
25 first wiring state.

3. The image reading apparatus according to claim 1, wherein
the resolution data input section comprises a first input

terminal and a second input terminal, and

wherein each of the control chips is selectively set to a first mode and a second mode, the first mode permitting parallel input of the resolution data into the first input terminal and
5 the second input terminal, the second mode permitting serial input of the resolution data into the second input terminal.

4. The image reading apparatus according to claim 3, wherein each of the control chips comprises a mode setting terminal
10 for selection of the first mode and the second mode, and

wherein only one of the first mode and the second mode is selected when the mode setting terminal is grounded.

5. The image reading apparatus according to claim 3, wherein
15 image reading at a predetermined resolution is inhibited when the second mode is selected and the first input terminal is held in a predetermined wiring state.

6. The image reading apparatus according to claim 1, wherein
20 each of the image sensor chips is a CCD image sensor chip including photodiodes, a line memory and an analog shift register; and

wherein each of the control chips generates signals for causing the photodiodes to transmit electric charge to the line memory and the analog shift register and signals for causing
25 the analog shift register to output signals, the signals outputted from the analog shift register being inputted into the control chip.

7. The image reading apparatus according to claim 1, wherein the control chips include amplifiers for amplifying signals outputted from the image sensor chips, and

wherein a reference voltage is applied to the amplifiers in parallel from a common power supplier.

8. A control chip for controlling driving of an image sensor chip, the control chip comprising:

a resolution data input section to which resolution data to specify resolution is inputted; and

a reset signal generator for generating a reset signal for causing the image sensor chip to reset accumulated electric charge in a cycle corresponding to the resolution data inputted into the resolution data input section.

9. The control chip according to claim 8, further comprising a resolution void terminal, wherein image reading at a predetermined resolution is inhibited when the resolution void terminal is held in a predetermined wiring state.